Is There a Need to Modify Existing Water Quality Standards in Hells Canyon?

Ralph Myers

Idaho Power Company

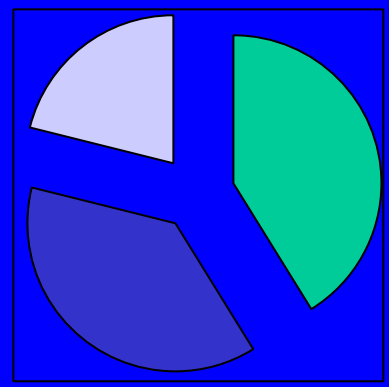

Lewiston
Grande Ronde River
Salmon River
Imnaha River
Hells Canyon Dam
Oxbow Dam
Brownlee Dam
Snake River
WASHINGTON
OREGON
IDAHO
Study Area
Vicinity Map

Is There a Need?

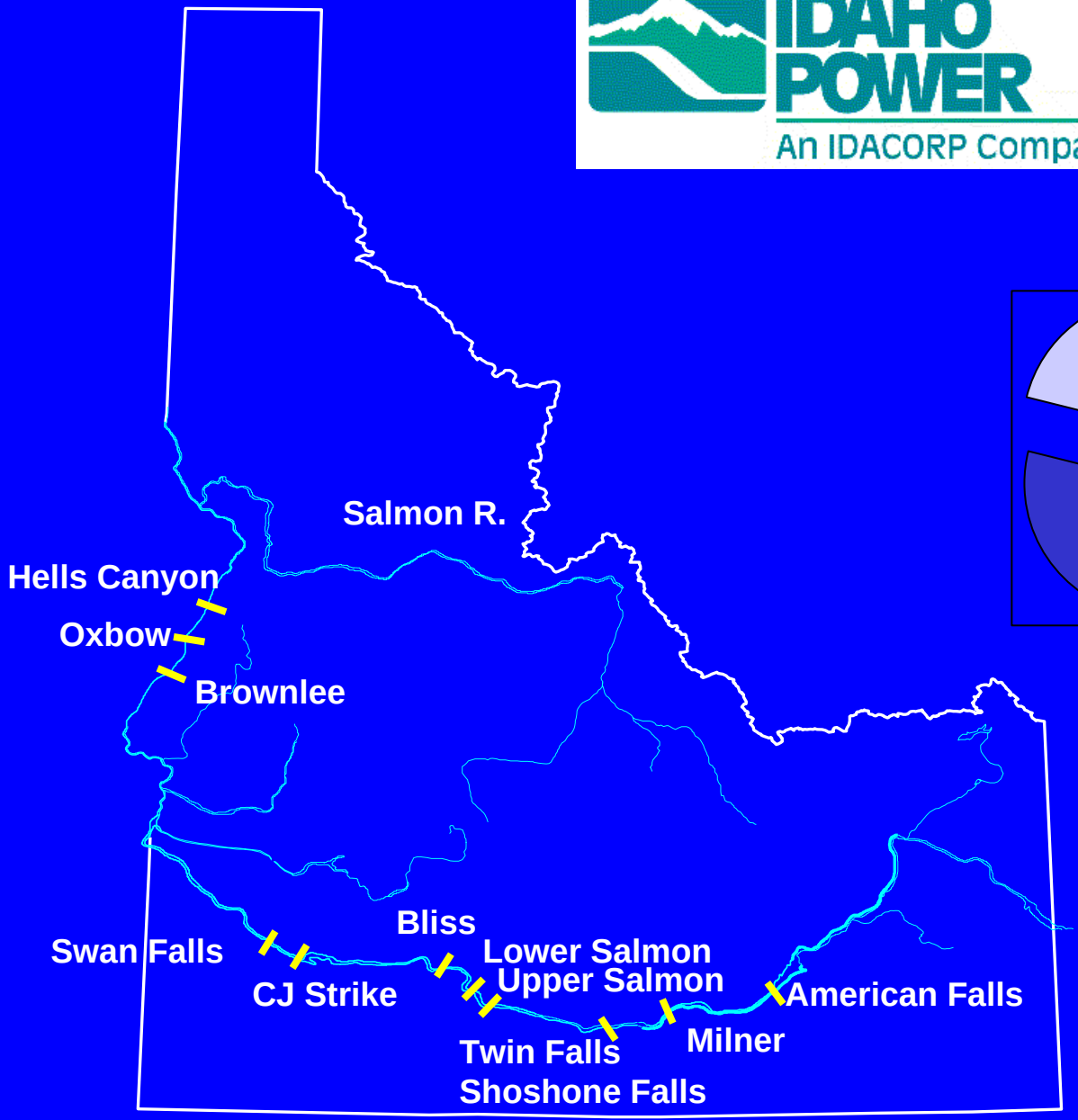
- **Does Anyone Care?**
- **Are Existing Standards Appropriate?**

IDAHO POWER
An IDACORP Company

Generation Sources: 2000



- Hydro
- Thermal
- Purchased

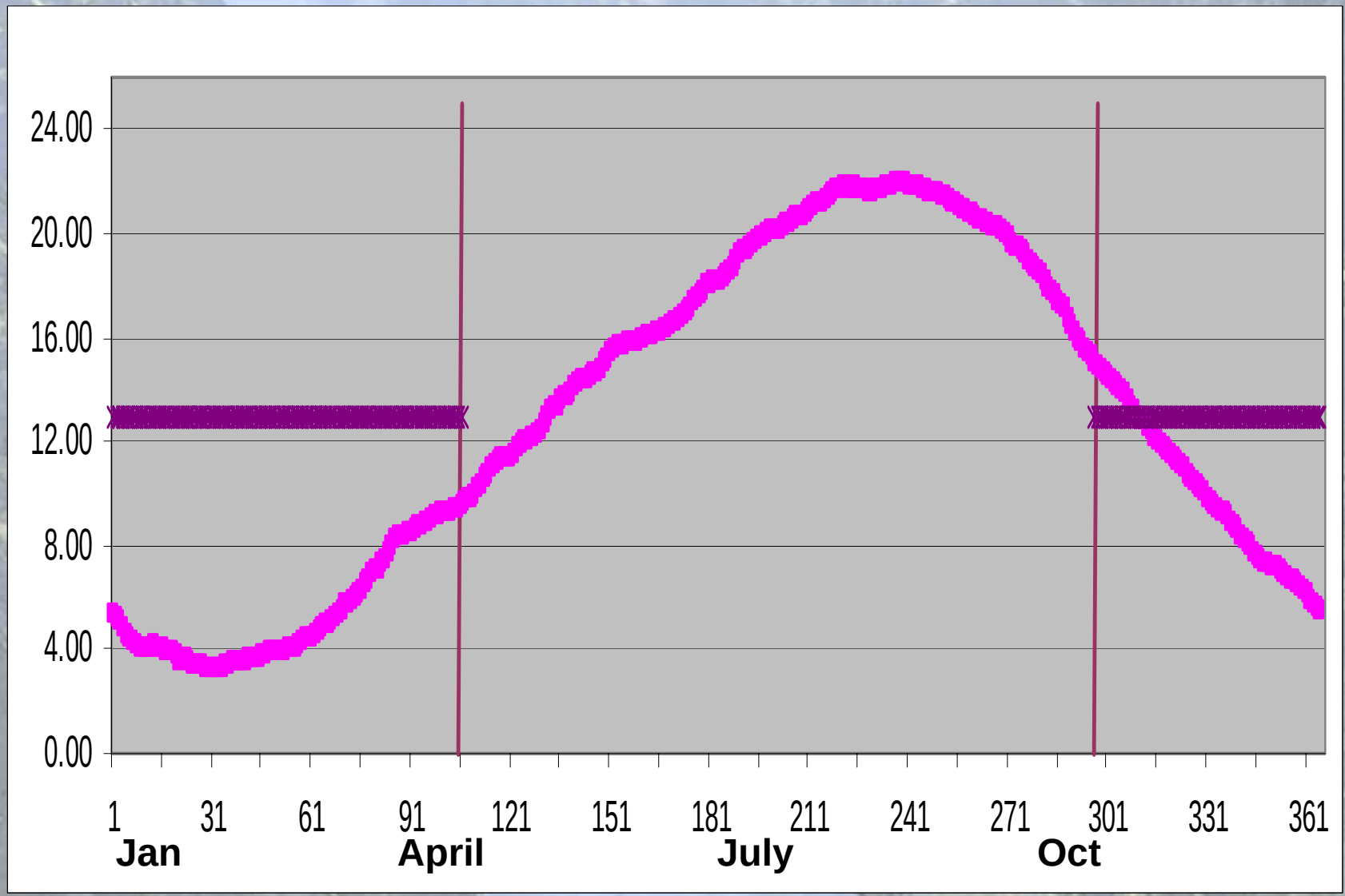


Fish Resources

Is The Existing Salmonid Spawning Temperature Standard Appropriate?

- A constant standard is not appropriate
- 13ºC is not the right standard

A constant standard is not appropriate



13ºC is not the right standard

- Olson and Foster (1955): No better survival at 13ºC than 16.1ºC.
- Ongoing IPC and Battelle Northwest studies show no difference between 13ºC and 15ºC
- Hanford Reach of the Columbia River has similar thermal regime to Hells Canyon and supports the strongest spawning population of fall chinook in the Northwest.
- IDEQ has failed to identify any evidence that the fall chinook population below Hells Canyon Dam is impaired by the temporal thermal shift.

Is Existing Salmonid Spawning Oxygen Standard Appropriate?

- Assumes a 3.0 mg/L difference between water column and intergravel levels
- Does not account for life stage differences

There is a Need to Modify Existing Salmonid Spawning Standards in Hells Canyon